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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A moving picture encoding method executed by using an

encoder for performing a multi-frame motion prediction with reference to a plurality of picture

frames, comprising:

selecting at least one reference frame form from a plurality of reference frames of the

same picture type which are used for the multi-frame motion prediction of a certain frame; and

encoding by said encoder the selected reference frame in a higher picture quality than the

other reference frames of the same picture type.

2. (original): The method according to claim 1, wherein the frame encoded in the higher

picture quality is a frame to which more code amount is assigned than the other frames of the

same picture type.

3. (original): The method according to claim 1, wherein the frame encoded in the higher

picture quality is a frame having a smaller quantizing parameter than the other frames of the

same picture type.

4. (original): The method according to claim 1, wherein the frame encoded in the higher

picture quality is a P-picture frame.

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5. (original): The method according to claim 1, wherein the frame encoded in the higher

picture quality is a B-picture frame.

6. (original): The method according to claim 5, further comprising a step of:

when a plurality of continuous B-picture frames is encoded, in comparison with a final B-

picture frame in said continuous B-picture frames, encoding B-picture frames prior to said final

B-picture frame in a higher picture quality.

7. (currently amended): The method according to claim 1,

wherein said selecting step comprises selecting a plurality of reference frames, and

said encoding step comprises encoding said plurality of selected reference frames;

said method further comprising a step of:

arranging the frames encoded in the higher picture quality at constant frame intervals.

8. (currently amended): The method according to claim 6,

wherein said selecting step comprises selecting a plurality of reference frames, and

said encoding step comprises encoding said plurality of selected reference frames;

said method further comprising a step of:

arranging the frames encoded in the higher picture quality at constant frame intervals.

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9. (original): The method according to claim 1, further comprising a step of:

adaptively changing a frame interval of the frames encoded in the higher picture quality

in accordance with differential information and motion information between a reference frame

and a subject frame to be encoded.

10. (original): The method according to claim 6, further comprising a step of:

adaptively changing a frame interval of the frames encoded in the higher picture quality

in accordance with differential information and motion information between a reference frame

and a subject frame to be encoded.

11. (previously presented): A moving picture encoding apparatus for performing a

multi-frame motion prediction with reference to a plurality of picture frames, comprising:

selection means for selecting at least one reference frame from a plurality of reference

frames of the same picture type which are used for the multi-frame motion prediction of a certain

frame;

and encoding means for encoding the selected reference frame in a higher picture quality

than the other reference frames of the same picture type.

12. (original): The apparatus according to claim 11, wherein said encoding means

assigns more code amount to the selected reference frame than the other reference frames of the

same picture type.

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13. (original): The apparatus according to claim 11, wherein said encoding means sets a

smaller quantizing parameter for the selected reference frame than the other reference frames of

the same picture type.

14. (original): The apparatus according to claim 11, wherein said selected reference

frame is a P-picture frame.

15. (original): The apparatus according to claim 11, wherein said selected reference

frame is a B-picture frame.

16. (original): The apparatus according to claim 15, wherein said selection means, from

a plurality of continuous B-picture frames, selects a B-picture frame prior to a final B-picture

frame in said continuous B-picture frames.

17. (original): The apparatus according to claim 11, wherein said selection means selects

said reference frame at constant frame intervals.

18. (original): The apparatus according to claim 16, wherein said selection means selects

said reference frame at constant frame intervals.

19. (original): The apparatus according to claim 11, further comprising:

moving picture analysis means for outputting differential information and motion

information between a reference frame and a subject frame to be encoded,

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wherein said selection means selects said reference frame in a manner that frame intervals of reference frames to be selected are adaptively changed in accordance with said

differential information and said motion information.

20. (original): The apparatus according to claim 16, further comprising:

moving picture analysis means for outputting differential information and motion

information between a reference frame and a subject frame to be encoded:

wherein said selection means selects said reference frame in a manner that frame

intervals of reference frames to be selected are adaptively changed in accordance with said

differential information and said motion information.

21. (previously presented): An input/output apparatus to/from which moving picture

data encoded by performing a multi-frame motion prediction with reference to a plurality of

picture frames is input or output:

wherein said encoded moving picture data includes a frame encoded in a higher picture

quality than the other frames of the same picture type in reference frames used for the multi-

frame motion prediction of a certain frame.

22. (currently amended): An input/output apparatus to/from which moving picture data

encoded by performing a multi-frame motion prediction with reference to a plurality of picture

frames is input and output, comprising:

a video decoder for decoding said encoded moving picture data; and

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monitor means for monitoring a picture type, a reference frame, a quantizing parameter, a variable length code, and a frame memory, supplied from said video decoder 4 and for determining whether or not said encoded moving picture data includes a reference frame that is used for the multi-frame prediction and that is encoded in the higher picture quality than the other frames of the same picture type.

23. - 26. (canceled).